

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

HENSEN, ET AL.

Serial Number: To be assigned

Group Art Unit: To be assigned

Filed: February 10, 2005

Examiner: To be assigned

For: Streptococcus uberis protein, nucleic acid sequence encoding the same and its use in a mastitis vaccine

Corresponding to: PCT/EP2003/008704 filed August 6, 2003

SUBMISSION OF SEQUENCE LISTING

Assistant Commissioner of Patents
Alexandria, VA 22313

February 10, 2005

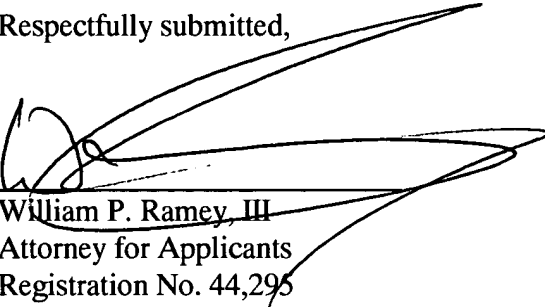
Sir:

Applicants are submitting herewith the Sequence Listing for the above-identified application both in paper copy form and in computer readable form.

The name of the file on the computer readable form is 2002.013 SEQ LIST. The paper copy and the computer readable form are the same. No new matter is added hereby.

Please replace the current sequence listing in the specification with the instant sequence listing.

Respectfully submitted,



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2002.013 SEQ LIST
SEQUENCE LISTING

<110> AKZO Nobel N.V.

<120> Novel mastitis vaccine

<130> 2002.013

<160> 2

<170> PatentIn version 3.1

<210> 1

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Cys	Phe	Tyr	Gln	Ala	Tyr	Ile	Thr	His	Gln	Asn	Val	Gln	Asn	Val	Met	
			20					25					30			

caa	tac	aaa	cca	atg	gtt	gaa	aaa	acc	ttg	gct	gaa	aat	gat	acg	act	144
Gln	Tyr	Lys	Pro	Met	Val	Glu	Lys	Thr	Leu	Ala	Glu	Asn	Asp	Thr	Thr	
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Ala	Asn	Val	Asn	Leu	Val	Leu	Ala	Met	Ile	Tyr	Thr	Glu	Thr	Lys	Gly	
		50				55					60					

ggc	cag	gca	gat	gtc	atg	caa	tct	agc	gaa	agt	agt	agt	ggc	gtg	act	240
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Leu Ser Glu Asn Leu Thr Leu Ala Glu Lys Ala Gly Val Asp Ser Trp				
	100	105	110	
act gca gta caa gct tac aat ttt gga aca gct tac att gat tat gtg				384
Thr Ala Val Gln Ala Tyr Asn Phe Gly Thr Ala Tyr Ile Asp Tyr Val				
	115	120	125	
gca aaa aat ggt ggt gac aac act atc tct ttg gct agt cat tat tct				432
Ala Lys Asn Gly Gly Asp Asn Thr Ile Ser Leu Ala Ser His Tyr Ser				
	130	135	140	
aaa agt gtt gta gct cca agt tta ggg aat aag gat gga aaa atg tat				480
Lys Ser Val Val Ala Pro Ser Leu Gly Asn Lys Asp Gly Lys Met Tyr				
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tta tat tac cat cca att gcc ctc ctc tat ggc ggt aaa ctt tat caa				528
Leu Tyr Tyr His Pro Ile Ala Leu Leu Tyr Gly Gly Lys Leu Tyr Gln				
	165	170	175	
aat ggt ggt aat att tat tat tca cga gaa gtt cat ttt aat tat tac				576
Asn Gly Gly Asn Ile Tyr Tyr Ser Arg Glu Val His Phe Asn Tyr Tyr				
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<212> PRT

<213> Streptococcus uberis

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Gln Tyr Lys Pro Met Val Glu Lys Thr Leu Ala Glu Asn Asp Thr Thr
35 40 45

Ala Asn Val Asn Leu Val Leu Ala Met Ile Tyr Thr Glu Thr Lys Gly
50 55 60

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Gly Gln Ala Asp Val Met Gln Ser Ser Glu Ser Ser Ser Gly Val Thr
 65 70 75 80

Asn Ser Ile Thr Asp Ser Gln Ser Ser Ile Gln His Gly Val Lys Leu
 85 90 95

Leu Ser Glu Asn Leu Thr Leu Ala Glu Lys Ala Gly Val Asp Ser Trp
 100 105 110

Thr Ala Val Gln Ala Tyr Asn Phe Gly Thr Ala Tyr Ile Asp Tyr Val
 115 120 125

Ala Lys Asn Gly Gly Asp Asn Thr Ile Ser Leu Ala Ser His Tyr Ser
 130 135 140

Lys Ser Val Val Ala Pro Ser Leu Gly Asn Lys Asp Gly Lys Met Tyr
 145 150 155 160

Leu Tyr Tyr His Pro Ile Ala Leu Leu Tyr Gly Gly Lys Leu Tyr Gln
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Asn Gly Gly Asn Ile Tyr Tyr Ser Arg Glu Val His Phe Asn Tyr Tyr
 180 185 190

Leu Ile Gln Leu Leu Ser Lys Phe
 195 200